

Appl. No. 10/713,353
Reply to Office Action of November 29, 2007
Reply filed February 28, 2008

Amendments to Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (Previously Presented) A digital device capable of recharging a rechargeable battery comprising:

a consuming current detect unit for detecting a consuming current input to the digital device;

a control unit for generating a control signal based on the consuming current and a battery recharging current;

a recharging current detect unit for detecting the battery recharging current as the battery is recharged; and

a recharging control unit for regulating the current to the rechargeable battery in proportion to the control signal output from the control unit and the battery recharging current detected by the recharging current detect unit.

2. (Original) The digital device capable of recharging a rechargeable battery according to claim 1, wherein the control signal includes a pulse width modulation signal.

3. (Previously Presented) The digital device capable of recharging a rechargeable battery according to claim 2, wherein the pulse width modulation control signal has a duty ratio adjusted according to the consuming current detected by the consuming current detect unit.

4. (Original) The digital device capable of recharging a rechargeable battery according to claim 1, wherein the consuming current detect unit comprises:

a first current detecting resistor for detecting the consuming current; and

a first operational amplifier, wherein a first end of the first current detecting resistor is coupled to an inverting input of the first operational amplifier and the second end of the first current detecting resistor is coupled to the non-inverting input of the first operational amplifier.